UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

9 November 2006

Keith Forman
Environmental Coordinator for
Hunters Point Shipyard
Department of the Navy
Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310

RE: Review of the Draft Survey Unit Project Reports Abstract and the Survey Unit 11 Project Report, Parcel B Sanitary Sewer and Storm Drain Removal, Hunters Point Shipyard, San Francisco, California, October 2006

Dear Keith:

The U.S. Environmental Protection Agency (EPA) has completed its review of the *"Review of the Draft Survey Unit Project Reports Abstract and the Survey Unit 11 Project Report, Parcel B Sanitary Sewer and Storm Drain Removal, Hunters Point Shipyard, San Francisco, California, October2006."* The Agency's specific comments are discussed in the attachment.

As discussed in Section 1.1. "Purpose," of the subject report, the intent of the report is to document compliance with the release criteria and demonstrate that remedial actions for the "radiological surveys resulting from the removal of the sanitary sewer and storm drains located within area 9 in Parcel B." However, what seems to require additional clarification is whether the reports should also include a summary of the remedial activities that were conducted. Several comments concerning this issue are discussed in the attachment.

The final status survey for Unit 11 indicates that the residual levels of radiological contamination in both the trench unit and the overburden/backfill materials meet the radiological release levels for Cesium-137, Strontium-90, and Radium-226. Moreover, the report further indicates that there is no significant difference in activity between the survey units and the background reference area. This finding, combined with the RESRAD modeling results which indicate doses well under the dose limit of 25 millirem per year (mrem/yr), supports the reports

conclusion that the site meets the criteria for free release. We note that the Department of the Navy is applying a dose limit of 25 mrem/yr which is greater than the Environmental Protection Agency (EPA) limit of 15 mrem/yr, for unrestricted release. However, the residual doses calculated for both the trench and the overburden material are less than one mrem/yr and, thus, meet the EPA dose limit.

EPA reaffirms its commitment to working in partnership with the Department of the Navy to expeditiously facilitate the cleanup and transfer of property at the former Hunters Point Shipyard in a manner that is protective of human health and the environment

Please feel free to contact me at 415-972-3023 if you have any questions.

Sincerely,

James Ricks
Project Manager
Superfund Division (SFD-8-1)

cc: (see Distribution List)

Distribution List HPS

Pat Brooks
Lead RPM (Hunters Point Shipyard)
Department of the Navy
Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310

Steve Hall
Senior Project Manager
Tetra Tech EM, Inc.
1230 Columbia Street, Suite 1000
San Diego, CA 92101

Tom Lanphar
Office of Military Facilities
Department of Toxics Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710-2721

James Ponton
California Regional Water Quality Control Board
SF Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Barbara Bushnell
HPS RAB Co-Chair
6 Vistaview Court
San Francisco, CA 94124

Amy Brownell
City and County of San Francisco
Department of Public Health
1390 Market Street, Suite 210
San Francisco, Ca 94102

Karla Brasaemle
TechLaw
Suite 1010
90 New Montgomery Street
San Francisco, CA 94105

U.S. Environmental Protection Agency
Technical Review Comments
Draft Survey Unit Project Reports Abstract and the Survey Unit 11 Project Report, Parcel B Sanitary Sewer and Storm Drain Removal, Hunters Point Shipyard, San Francisco, California, October 2006

GENERAL COMMENTS

1. According to the Draft Survey Unit Project Reports Abstract, Parcel B Sanitary Sewer and Storm Drain Removal (the Abstract), the Wilcoxon Rank Sum (WRS) test was applied in determining the appropriate number of sample points required to conduct the final status surveys. The WRS test is applied when a comparison between the survey unit and a background reference area is required (i.e., the radionuclides of concern are present in background). In reviewing the reference area soil measurements provided in Table 3-1 (page 3-6), the activity of Cs-137 and Strontium-90 (Sr-90) are below the minimum detectable concentration (MDC). The activities presented are essentially negligible readings and indicative of expected results. Cs-137 and Sr-90 are not naturally occurring radionuclides and typically background readings, while present as a result of fallout, are often not measurable. For Cs-137 and Sr-90, it appears that the application of the Sign test may be more appropriate for determining the number of data points for the final status surveys. It is also noted that the Work Plan applied the Sign test for determining the minimum number of samples that would be required to determine if release criteria had been met. The Abstract indicates that 18 samples will be collected to determining whether the release criteria have been met, which is consistent with the methodology outlined in the Work Plan. However, it is not clear whether an additional nine samples (as determined necessary by the WRS test) will be collected for comparison to background (applying the WRS test along with Radium-226 (Ra-226) data, resulted in only nine required samples per survey unit). Please clarify the applicability of the Sign test and the WRS test. Please also discuss whether an additional nine samples will be collected and if these nine samples and the use of the WRS test are to be used only for Ra-226 and comparison to the background reference area.